

Three Cases of COVID-19-related First Onset Brief Reactive Psychosis

Sol Jaworowski MBBS FRANZCP¹, Mark Weiser MD^{2,3}, Cornelius Gropp MD¹, and Moria Malka MD¹

¹Department of Consultation and Liaison Psychiatry, Shaare Zedek Medical Center, affiliated with Hebrew University Medical School, Jerusalem, Israel

²Department of Psychiatry, Sheba Medical Center, Tel Hashomer, Israel

³Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel

KEY WORDS: coronavirus disease-19 (COVID-19), first onset, psychosis

IMAJ 2020; 22: 612–612

We present three cases of first onset, transient psychosis in male patients diagnosed with coronavirus disease-19 (COVID-19). In all cases the psychosis resolved over the course of 2 days with parenteral neuroleptic medication. There was no pre-existing history of mental illness in any of the patients. To the best of our knowledge, this is the first report of first onset psychosis associated with COVID-19.

PATIENT DESCRIPTION

PATIENT 1

The first patient was admitted to the COVID-19 ward with mild respiratory symptoms. He became acutely psychotic, with grandiose and religious delusions. He received intramuscular haloperidol and lorazepam and the psychosis resolved completely over the course of 2 days with no further medication.

PATIENT 2

The second patient presented acutely psychotic with grandiose and religious delusions after being fined for transgressing social distancing restrictions. He was

given intramuscular olanzapine and lorazepam, tested positive for COVID-19, and was involuntarily hospitalized. The psychosis resolved over 2 days and he was subsequently discharged with no medication.

PATIENT 3

The third patient was hospitalized with symptoms of fever and a cough and tested positive for COVID-19. He reported daily use of cannabis. Three days after admission he developed an acute onset of psychosis with paranoid, grandiose, and religious delusions. He was hospitalized involuntarily and received intramuscular haloperidol and lorazepam for one day. His psychosis resolved completely over 2 days with no ongoing psychotropic medication.

COMMENT

In all three patients the psychosis was brief, followed by complete return to pre-morbid level of functioning after 2 days. All three patients were COVID-19 positive but the respiratory symptoms were mild or absent.

The psychosis in all three patients warranted a diagnosis of brief psychotic disorder. A cannabis withdrawal syndrome was considered for the third patient.

Steroid treatment has been implicated in the psychosis of 4 patients with severe

acute respiratory syndrome coronavirus-2 (SARS-CoV-2) [1].

COVID-19 crosses the blood-brain-barrier [2] and therefore might conceivably cause the psychosis. However, in the patients described in our report, the physical manifestations of COVID-19 were mild, without steroid treatment, and therefore the most likely mechanism for the psychosis was a non-organic brief psychotic disorder induced by situational stress related to the COVID-19 pandemic.

CONCLUSIONS

It is important that patients presenting with a psychotic disorder as a manifestation of COVID-19 and their families be made aware of this symptom and its good prognosis.

Correspondence

Dr. S. Jaworowski

Dept. of Consultation and Liaison Psychiatry, Shaare Zedek Medical Center, Jerusalem 9103102, Israel

Fax: (972-2) 655-5058

email: solj@szmc.org.il

References

- Cheng SK, Tsang JS, Ku KH, Wong CW, Ng YK. Psychiatric complications in patients with severe acute respiratory syndrome (SARS) during the acute treatment phase: a series of 10 cases. *Br J Psychiatry* 2004; 184: 359–60.
- Li YC, Bai WZ, Hashikawa T. The neuroinvasive potential of SARS-CoV2 may play a role in the respiratory failure of COVID-19 patients. *J Med Virol* 2020; 92 (6): 552–5.

We make a living by what we get, but we make a life by what we give.

Winston Churchill (1874–1965), British statesman, Prime Minister of the United Kingdom, won the Nobel Prize in Literature in 1953 for his overall lifetime body of work